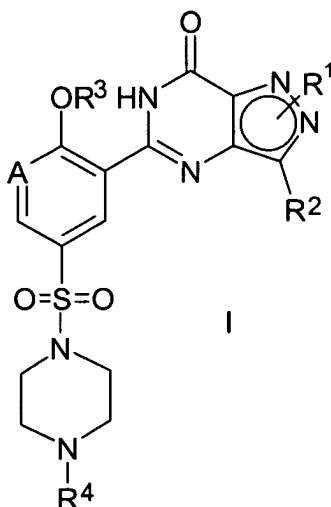


IN THE CLAIMS

1-16 (Canceled)

17. (Currently amended) A process for the production of a compound of general formula I:



wherein

A represents CH or N;

R<sup>1</sup> represents H, lower alkyl (which alkyl group is optionally interrupted by O), Het, alkylHet, aryl or alkylaryl, which latter five groups are all optionally substituted (and/or, in the case of lower alkyl, optionally terminated) by one or more substituents selected from halo, cyano, nitro, lower alkyl, OR<sup>5</sup>, C(O)R<sup>6</sup>, C(O)OR<sup>7</sup>, C(O)NR<sup>8</sup>R<sup>9</sup>, NR<sup>10a</sup>R<sup>10b</sup> and SO<sub>2</sub>NR<sup>11a</sup>R<sup>11b</sup>;

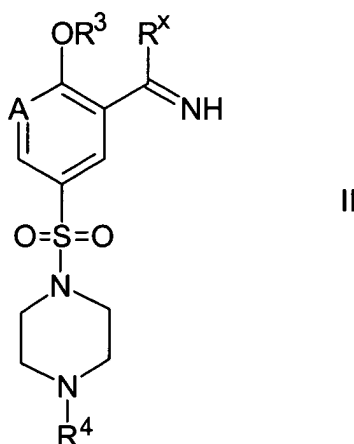
R<sup>2</sup> and R<sup>4</sup> independently represent lower alkyl;

R<sup>3</sup> represents lower alkyl, which alkyl group is optionally interrupted by oxygen;

Het represents an optionally substituted four- to twelve-membered heterocyclic group, which group contains one or more heteroatoms selected from nitrogen, oxygen and sulfur;

R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>11a</sup> and R<sup>11b</sup> independently represent H or lower alkyl;

$R^{10a}$  and  $R^{10b}$  either independently represent, H or lower alkyl or, together with the nitrogen atom to which they are attached, represent azetidiny, pyrrolidiny or piperidiny,  
which process comprises the reaction of a compound of formula II,



wherein

$R^x$  is a group, substitutable by an aminopyrazole, selected from:

-OR<sup>e</sup>, wherein R<sup>e</sup> independently represents the same groups as defined by

R<sup>1</sup>:

-NH<sub>2</sub>;

-NHR<sup>a</sup>, wherein R<sup>a</sup> represents -OR<sup>1</sup> or halo;

-N(R<sup>b</sup>)R<sup>c</sup>, wherein R<sup>b</sup> and R<sup>c</sup> each independently represent the same groups as defined by R<sup>1</sup>;

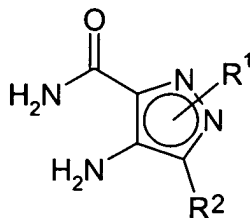
-SH; and

-SR<sup>d</sup>; wherein R<sup>d</sup> independently represents the same groups as defined by

R<sup>1</sup>;

and A, R<sup>3</sup> and R<sup>4</sup> are as defined above,

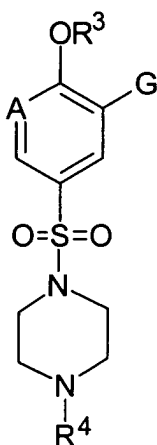
with a compound of ~~general~~ formula III,



III

wherein  $R^1$  and  $R^2$  are as defined above

and wherein the compound of formula II is prepared by way of reaction of a compound of formula IV,



IV

wherein G represents a carboxylic acid group ( $-C(O)OH$ ) or a derivative thereof, with an appropriate reagent for converting the group G to a  $-C(R^x)=NH$  group.

18. (Previously presented) A process as claimed in Claim 17, wherein, in the compound of formula IV, the group G represents  $-CN$ ,  $-C(OR^e)_3$ ,  $-C(O)NH_2$  or  $-C(=NOR^f)NR_2$ , wherein  $R^f$  represents H or lower alkyl and  $R^e$  is lower alkyl (which alkyl group is optionally interrupted by O), Het, alkylHet, aryl or alkylaryl, which latter five groups are all optionally substituted (and/or, in the case of lower alkyl, optionally terminated) by one or more substituents selected from halo, cyano, nitro, lower alkyl,  $OR^5$ ,  $C(O)R^6$ ,  $C(O)OR^7$ ,  $C(O)NR^8R^9$ ,  $NR^{10a}R^{10b}$  and  $SO_2NR^{11a}R^{11b}$ .

19. (Previously presented) A process as claimed in Claim 18, wherein, when  $R^x$  represents  $-OR^e$  (wherein  $R^e$  represents lower alkyl (optionally interrupted by O), alkylHet or alkylaryl):

(a) a corresponding compound of formula IV in which G represents -CN is reacted with an alcohol of formula VA,



wherein  $\text{R}^{\alpha}$  represents lower alkyl (optionally interrupted by O), alkylHet or alkylaryl, and Het is as defined in Claim 17 in the presence of a protic acid;

(b) a corresponding compound of formula IV in which G represents -C(O)NH<sub>2</sub> is reacted with an appropriate alkylating agent of formula VB,



wherein  $\text{Z}^1$  represents a leaving group and  $\text{R}^{\alpha}$  is as defined above; or

(c) a corresponding compound of formula IV in which G represents -C(OR<sup>α</sup>)<sub>3</sub>, wherein  $\text{R}^{\alpha}$  is as defined above, is reacted with ammonia, or an *N*-protected derivative thereof.

20. (Previously presented) A process as claimed in Claim 18, wherein, when  $\text{R}^{\text{x}}$  represents -OR<sup>e</sup> (wherein  $\text{R}^{\text{e}}$  represents Het or aryl), a corresponding compound of formula IV in which G represents -CN is reacted with a compound of formula VC,



wherein  $\text{R}^{\beta}$  represents Het or aryl, and Het is as defined in Claim 17.

21. (original) A process as claimed in Claim 18, wherein, when  $\text{R}^{\text{x}}$  represents -NH<sub>2</sub>:

(a) a corresponding compound of formula IV in which G represents -CN is reacted with hydrazine, hydroxylamine or O-lower alkyl hydroxylamine, followed by reduction of the resultant intermediate under standard conditions; or

(b) a corresponding compound of formula IV in which G represents -C(=NOR<sup>f</sup>)NR<sub>2</sub>, wherein  $\text{R}^{\text{f}}$  is as defined in Claim 18, is reduced under standard conditions.

22. (Previously presented) A process as claimed in Claim 18, wherein, when  $\text{R}^{\text{x}}$  represents -NH<sub>2</sub>, -NHR<sup>a</sup> or -N(R<sup>b</sup>)R<sup>c</sup>, a corresponding compound of formula IV in which G represents -CN is reacted with a compound of formula VD,



VD

wherein  $\text{R}^x$  and  $\text{R}^\delta$  independently represent H or  $\text{R}^a$ , and  $\text{R}^a$  is lower alkyl (which alkyl group is optionally interrupted by O), Het, alkylHet, aryl or alkylaryl, which latter five groups are all optionally substituted (and/or, in the case of lower alkyl, optionally terminated) by one or more substituents selected from halo, cyano, nitro, lower alkyl,  $\text{OR}^5$ ,  $\text{C}(\text{O})\text{R}^6$ ,  $\text{C}(\text{O})\text{OR}^7$ ,  $\text{C}(\text{O})\text{NR}^8\text{R}^9$ ,  $\text{NR}^{10a}\text{R}^{10b}$  and  $\text{SO}_2\text{NR}^{11a}\text{R}^{11b}$ .

23. (original) A process as claimed in Claim 18, wherein, when  $\text{R}^x$  represents -SH:

- (a) a corresponding compound of formula IV in which G represents -CN is reacted with hydrogen sulfide; or
- (b) a corresponding compound of formula IV in which G represents -C(O)NH<sub>2</sub> is reacted with a reagent that effects oxygen-sulfur exchange.

24. (Previously presented) A process as claimed in Claim 18, wherein, when  $\text{R}^x$  represents -SR<sup>d</sup>, a corresponding compound of formula IV in which G represents -CN is reacted with a compound of formula VE,

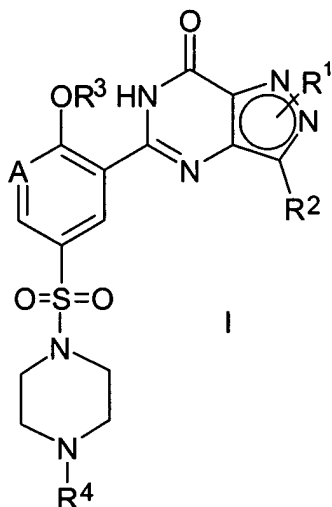


VE

wherein  $\text{R}^d$  is lower alkyl (which alkyl group is optionally interrupted by O), Het, alkylHet, aryl or alkylaryl, which latter five groups are all optionally substituted (and/or, in the case of lower alkyl, optionally terminated) by one or more substituents selected from halo, cyano, nitro, lower alkyl,  $\text{OR}^5$ ,  $\text{C}(\text{O})\text{R}^6$ ,  $\text{C}(\text{O})\text{OR}^7$ ,  $\text{C}(\text{O})\text{NR}^8\text{R}^9$ ,  $\text{NR}^{10a}\text{R}^{10b}$  and  $\text{SO}_2\text{NR}^{11a}\text{R}^{11b}$ .

25. (original) A process as claimed in Claim 18, wherein, when  $\text{R}^x$  represents halo, a corresponding compound of formula IV in which G represents -C(O)NH<sub>2</sub> is reacted with a halogenating agent.

26. (Currently amended) A process for the production of a compound of ~~general~~ formula I:



wherein

A represents CH or N;

R<sup>1</sup> represents H, lower alkyl (which alkyl group is optionally interrupted by O), Het, alkylHet, aryl or alkylaryl, which latter five groups are all optionally substituted (and/or, in the case of lower alkyl, optionally terminated) by one or more substituents selected from halo, cyano, nitro, lower alkyl, OR<sup>5</sup>, C(O)R<sup>6</sup>, C(O)OR<sup>7</sup>, C(O)NR<sup>8</sup>R<sup>9</sup>, NR<sup>10a</sup>R<sup>10b</sup> and SO<sub>2</sub>NR<sup>11a</sup>R<sup>11b</sup>;

R<sup>2</sup> and R<sup>4</sup> independently represent lower alkyl;

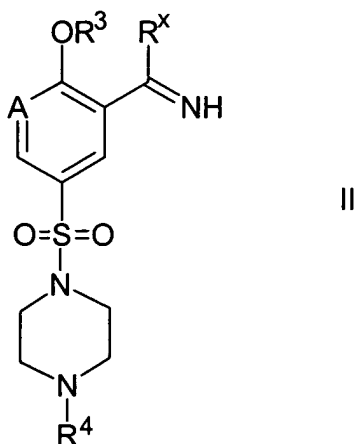
R<sup>3</sup> represents lower alkyl, which alkyl group is optionally interrupted by oxygen;

Het represents an optionally substituted four- to twelve-membered heterocyclic group, which group contains one or more heteroatoms selected from nitrogen, oxygen and sulfur;

R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>11a</sup> and R<sup>11b</sup> independently represent H or lower alkyl;

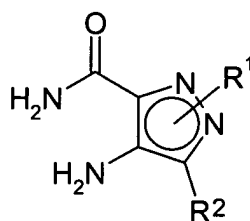
R<sup>10a</sup> and R<sup>10b</sup> either independently represent, H or lower alkyl or, together with the nitrogen atom to which they are attached, represent azetidiny, pyrrolidinyl or piperidinyl,

which process comprises the reaction of a compound of formula II,



wherein R<sup>x</sup> is a group substitutable by an aminopyrazole and A, R<sup>3</sup> and R<sup>4</sup> are as defined above,

with a compound of general formula III,



wherein R<sup>1</sup> and R<sup>2</sup> are as defined above

and wherein the compound of formula II is prepared by way of reaction of another compound of formula II with a reagent that will convert one R<sup>x</sup> group to another.

27. (Currently amended) A process as claimed in Claim 26, wherein, when R<sup>x</sup> represents -OR<sup>e</sup> (wherein R<sup>e</sup> represents lower alkyl, alkylHet or alkylaryl), a corresponding compound of formula II in which R<sup>x</sup> represents Cl is reacted with a compound of formula VA, R<sup>α</sup>OH as defined in Claim 19.

28. (Currently amended) A process as claimed in Claim 26, wherein, when R<sup>x</sup> represents -NH<sub>2</sub>, -NHR<sup>a</sup> or -N(R<sup>b</sup>)R<sup>c</sup>, a corresponding compound of formula II in which R<sup>x</sup> represents Cl, -SH, -SR<sup>d</sup> or -OR<sup>e</sup>, wherein R<sup>d</sup> and R<sup>e</sup> are lower alkyl

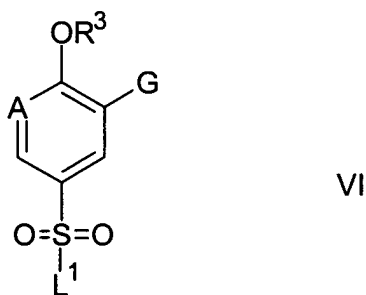
(which alkyl group is optionally interrupted by O), Het, alkylHet, aryl or alkylaryl, which latter five groups are all optionally substituted (and/or, in the case of lower alkyl, optionally terminated) by one or more substituents selected from halo, cyano, nitro, lower alkyl, OR<sup>5</sup>, C(O)R<sup>6</sup>, C(O)OR<sup>7</sup>, C(O)NR<sup>8</sup>R<sup>9</sup>, NR<sup>10a</sup>R<sup>10b</sup> and SO<sub>2</sub>NR<sup>11a</sup>R<sup>11b</sup>, is reacted with an appropriate compound of formula VD, HN(R<sup>x</sup>)(R<sup>δ</sup>) as defined in Claim 22, or an acid addition salt thereof.

29. (Currently amended) A process as claimed in Claim 26, wherein, when R<sup>x</sup> represents -SR<sup>d</sup>, a corresponding compound of formula IV in which R<sup>x</sup> represents -SH is reacted with a compound of formula VF,

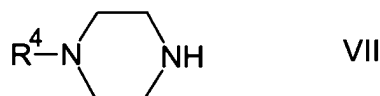


wherein Z<sup>2</sup> represents a leaving group and R<sup>d</sup> is lower alkyl (which alkyl group is optionally interrupted by O), Het, alkylHet, aryl or alkylaryl, which latter five groups are all optionally substituted (and/or, in the case of lower alkyl, optionally terminated) by one or more substituents selected from halo, cyano, nitro, lower alkyl, OR<sup>5</sup>, C(O)R<sup>6</sup>, C(O)OR<sup>7</sup>, C(O)NR<sup>8</sup>R<sup>9</sup>, NR<sup>10a</sup>R<sup>10b</sup> and SO<sub>2</sub>NR<sup>11a</sup>R<sup>11b</sup> as defined in Claim 28.

30. (Previously presented) A process as claimed in Claim 17, wherein the compound of formula IV is prepared by reaction of a compound of formula VI,



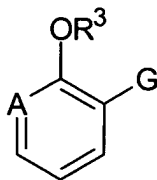
wherein L<sup>1</sup> is a leaving group and A, G and R<sup>3</sup> are as defined in Claim 17, with a compound of formula VII,



wherein R<sup>4</sup> is as defined in Claim 17.

31. (Currently amended) A process as claimed in Claim 30, wherein the compound of formula VI is prepared by reaction of a compound of formula VIII,





VIII

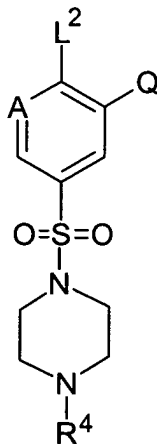
wherein

A represents CH or N,

G represents a carboxylic acid group (-C(O)OH) or a derivative thereof, and

R³ represents lower alkyl, which alkyl group is optionally interrupted by oxygen  
~~are as defined in Claim 17,~~ with a reagent that may be used for the introduction of a -  
SO<sub>2</sub>L¹ group into an aromatic or heteroaromatic ring system.

32. (Previously presented) A process as claimed in Claim 17, wherein the compound of formula IV is one in which G represents -CN or -C(O)NH<sub>2</sub>, and is prepared by reaction of a compound of formula IX,



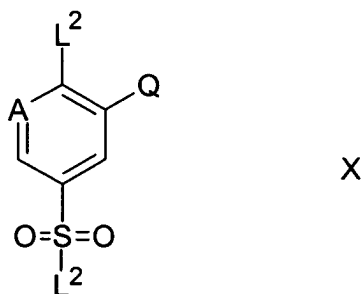
IX

wherein Q represents -CN or -C(O)NH<sub>2</sub> and L² represents a leaving group, with a compound that will provide the group R³O.

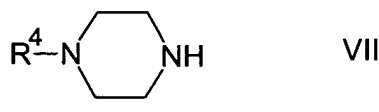
33. (original) A process as claimed in Claim 32, wherein the compound that will provide the group R³O is a lower alkyl alcohol.

34. (Previously presented) A process as claimed in Claim 32, wherein the leaving group L² is chloro.

35. (Currently amended) A process as claimed in Claim 32, wherein the compound of formula IX is prepared by reaction of a compound of formula X,



with a compound of formula VII

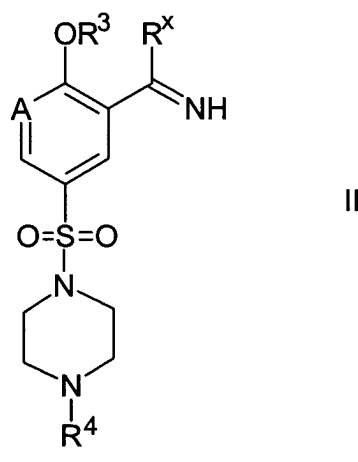


wherein R<sup>4</sup> is lower alkyl as defined in Claim 30.

36. (Previously presented) A process as claimed in Claim 17, wherein the compound of formula IV is one in which G represents -CN, and is prepared by dehydration of a corresponding compound of formula IV in which G represents -C(O)NH<sub>2</sub>.

37. (Previously presented) A process as claimed in Claim 17, wherein the compound of formula IV in which G represents -C(O)NH<sub>2</sub> is prepared from a corresponding compound of formula IV in which G represents -C(O)OH by reaction with ammonia or a derivative thereof.

38. (Currently amended) A compound of formula II,



wherein

R<sup>x</sup> is a group substitutable by an aminopyrazole,

A is CH or N;

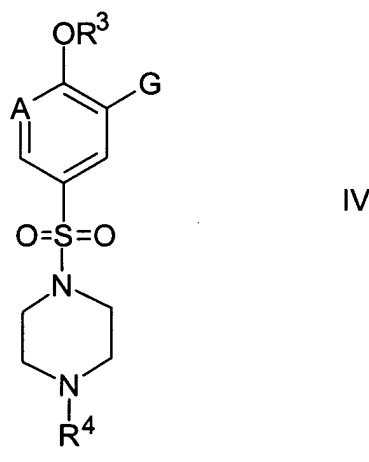
R<sup>3</sup> represents lower alkyl, which alkyl group is optionally interrupted by oxygen; and

R<sup>4</sup> represents lower alkyl as defined in Claim 17.

39. (original) A compound according to Claim 38 wherein A represents –CH, R<sup>3</sup> represents Et, R<sup>4</sup> represents Me and R<sup>x</sup> represents NH<sub>2</sub>.

40. (original) A compound according to Claim 38 wherein A represents –CH, R<sup>3</sup> represents Et, R<sup>4</sup> represents Et and R<sup>x</sup> represents NH<sub>2</sub>.

41. (Currently amended) A compound of formula IV,



wherein

G represents a carboxylic acid group (-C(O)OH) or a derivative thereof selected from -CN, -C(OR<sup>e</sup>)<sub>3</sub>, -C(O)NH<sub>2</sub> or -C(=NOR<sup>f</sup>)N(R<sup>e</sup>)<sub>2</sub> wherein R<sup>f</sup> represents H or lower alkyl and R<sup>e</sup> is as defined in Claim 17,

A represents CH or N;

R<sup>4</sup> represents lower alkyl, with the proviso that when A is CH, G is (-C(O)OH) and R<sup>3</sup> is ethyl, R<sup>4</sup> cannot be methyl;

R<sup>3</sup> represents lower alkyl, which alkyl group is optionally interrupted by oxygen, with the proviso that when A is N, G is (-C(O)OH) and R<sup>4</sup> is ethyl, R<sup>3</sup> cannot be – ethylethoxy.

as defined in Claim 17.

42. (Cancel)

43. (Previously presented) A compound according to Claim 41 wherein A represents N, R<sup>3</sup> represents Et, R<sup>4</sup> represents Et and G represents CO<sub>2</sub>Et.

44. (Previously presented) A compound according to Claim 41 wherein A represents -CH, R<sup>3</sup> represents Et, R<sup>4</sup> represents Et and G represents CN.

45. (Previously presented) A compound according to Claim 41 wherein A represents -CH, R<sup>3</sup> represents Et, R<sup>4</sup> represents Me and G represents CN.